Product Update

KEMET Electronics Corp.

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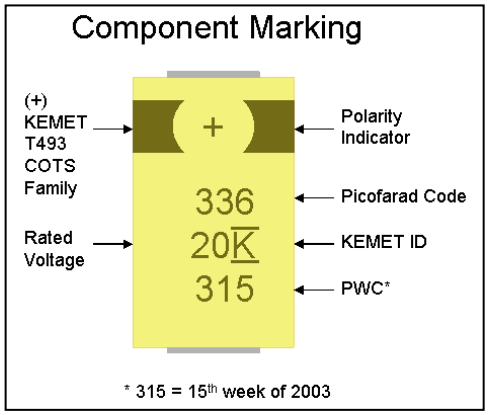
Tantalum

T493 / Military COTS Product

KEMET is releasing a family of product to fulfill the COTS (Commercial-Off-The-Shelf) requirements for military and aerospace applications. These devices are tantalum surface mount components with a variety of termination finishes and electrical screening options. Group A testing per MIL-PRF-55365 is performed on all T493 manufacturing lots.

The T493 designation will allow identification of these parts as complying with these requirements. The component marking has a "+" within the polarity band to distinguish this device among KEMET's tantalum surface mount devices. As with KEMET's previously released series, the device will have a capacitance code immediately below the polarity band. The voltage rating and print-week code (PWC) follow in two lines below the value code.



Terminations, Reliability, Surge, and ESR

The full part number will include a code defining the terminations, the Weibull reliability, surge test conditions, and the ESR range. The possible terminations include gold plated, hot solder dipped, solder plated, and solder fused.

The code designating reliability of the part will indicate whether the part has had no grading, has grading to B-level failure rate (less than or equal to 0.1%/kHrs) or C-level failure rate (less than or equal to 0.01%/kHrs). The code for the surge test will indicate if the part has received no surge testing, has been subjected to surge testing of 10 cycles at 25°C, or 10 cycles of surge testing at -55°C and +85°C. The component ESR level can be specified as either standard or low ESR (values listed in catalog).

This series allows tremendous flexibility to meet the performance requirements of a variety of applications. Where surge robustness may be critical, the most stringent testing protocol can be selected. In applications where ESR and response times are important, the low ESR version can be selected. In short, these parts can be custom designed for optimum performance.

T 493 D 227 K 006 C H 61 10

Tantalum

Series
493 – Military COTS

Case Size
A, B, C, D, X

Capacitance Picofarad Code
First two digits represent significant figures
Third digit specifies number of zeros to follow

Capacitance Tolerance
M = ± 20%
K = ± 10%
J = ± 5%

Voltage
As shown, except
006 = 6.3 VDC

Reliability
A – None
B – 0.1%/kHrs.
C – 0.01%/kHrs.

Termination Finish
B – Gold Plated
C – Hot Solder Dipped
H – Solder Plated
K – Solder Fused

Surge Test
61 = None
62 = 10 cycles +25°C
64 = 10 cycles -55°C, +85°C

ESR Range
10 – Standard ESR
20 – Low ESR